|                                                                                                                                                                                                                                                                                         | Angellandian No                                                                      | Auglicant(a)                                                                                                                     |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Notice of Allowability                                                                                                                                                                                                                                                                  | Application No.                                                                      | Applicant(s)                                                                                                                     |                    |
|                                                                                                                                                                                                                                                                                         | 10/674,060                                                                           | DUAN ET AL.                                                                                                                      | (W                 |
| Notice of Allowability                                                                                                                                                                                                                                                                  | Examiner                                                                             | Art Unit                                                                                                                         |                    |
|                                                                                                                                                                                                                                                                                         | Igwe U. Anya                                                                         | 2891                                                                                                                             |                    |
| The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in<br>or other appropriate commu<br>IGHTS. This application is s | n this application. If not included unication will be mailed in due co                                                           | ourse. <b>THIS</b> |
| 1. X This communication is responsive to Paper filed 13 October                                                                                                                                                                                                                         | <u>er 2005</u> .                                                                     |                                                                                                                                  |                    |
| 2. X The allowed claim(s) is/are <u>173,175-188,190-192,194-222</u> ,                                                                                                                                                                                                                   | 224,225,227-243 and 245-2                                                            | <u>249</u> .                                                                                                                     |                    |
| <ul> <li>3. Acknowledgment is made of a claim for foreign priority ur</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> </ul>                                                                                                   | been received.                                                                       | •                                                                                                                                |                    |
| 2. Certified copies of the priority documents have                                                                                                                                                                                                                                      | • •                                                                                  |                                                                                                                                  |                    |
| 3. Copies of the certified copies of the priority do                                                                                                                                                                                                                                    | cuments have been received                                                           | d in this national stage application                                                                                             | on from the        |
| International Bureau (PCT Rule 17.2(a)).                                                                                                                                                                                                                                                |                                                                                      |                                                                                                                                  |                    |
| * Certified copies not received:                                                                                                                                                                                                                                                        |                                                                                      |                                                                                                                                  |                    |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.                                                                                                                             |                                                                                      | a reply complying with the requ                                                                                                  | irements           |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm<br>INFORMAL PATENT APPLICATION (PTO-152) which give                                                                                                                                                                                    | itted. Note the attached EXA<br>es reason(s) why the oath or                         | MINER'S AMENDMENT or NO declaration is deficient.                                                                                | TICE OF            |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mus                                                                                                                                                                                                                                    | et be submitted.                                                                     |                                                                                                                                  |                    |
| (a) ☐ including changes required by the Notice of Draftspers                                                                                                                                                                                                                            |                                                                                      | v ( PTO-948) attached                                                                                                            |                    |
| 1)  hereto or 2)  to Paper No./Mail Date                                                                                                                                                                                                                                                |                                                                                      |                                                                                                                                  |                    |
| (b) ☐ including changes required by the attached Examiner's<br>Paper No./Mail Date                                                                                                                                                                                                      | s Amendment / Comment or                                                             | in the Office action of                                                                                                          |                    |
| Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t                                                                                                                                                       |                                                                                      |                                                                                                                                  | ack) of            |
| <ol> <li>DEPOSIT OF and/or INFORMATION about the depo-<br/>attached Examiner's comment regarding REQUIREMENT</li> </ol>                                                                                                                                                                 |                                                                                      |                                                                                                                                  | te the             |
| Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date                                                                                      | 6. Naterview St. Paper No./ Paper No./ 7.  Examiner's 8.  Examiner's 9.  Other       | formal Patent Application (PTO- ummary (PTO-413), Mail Date Amendment/Comment  Statement of Reasons for Alloy  PAINERE  EXAMINED | ance               |
| PTOL-37 (Rev. 7-05) No                                                                                                                                                                                                                                                                  | tice of Allowability                                                                 | (Partler Player No./Mai                                                                                                          | l Date 11252005    |
|                                                                                                                                                                                                                                                                                         |                                                                                      | 1                                                                                                                                |                    |

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## Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance. Applicant's claims 173, 175 – 188, 190 – 192, 194 – 222, 224, 225, 227 – 243, and 245 – 249 are allowable, because prior art does not teach inter alia:

(claims 173, 224) a thin film consisting essentially of semi-conducting nanowires with sufficient density of nanowires to achieve an operational current level deposited on a substrate; and

(claim 234) a plurality of nanowires deposited on a substrate, and each nanowire comprising a core and one or more shells, wherein the core and shells are of different material and forms a channel between source and drain contacts

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Remarks

3. The examiner has reviewed prior art in light of applicant's comments and amendment and finds it persuasive.

## Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igwe U. Anya whose telephone number is (571) 272-1887. The examiner can normally be reached on M - F 8:30am - 5:00pm.

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5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William B. Baumeister can be reached on (571) 272-1722. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

6. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Igwe U. Anya Examiner Art Unit 2891

IA

November 25, 2005